BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

In the Matter of:	)	
	)	
Implementation of the NET 911 Improvement Act of 2008	)	WC Docket No. 08-171

COMMENTS OF THE WASHINGTON STATE E911 PROGRAM

The Washington State Enhanced 911 Program was established pursuant to an initiative to the voters of Washington State in 1992 that mandated that Enhanced 911 be available, statewide. The Program assisted counties to achieve that goal and continues to assure Enhanced 911 availability through acquisition of network and database services and ongoing assistance to counties. Technological and operational evolution of the telephone systems residents of the State utilize to call 911 continues to challenge the program as it attempts to assure the 911 service level anticipated by the public. However the rapid evolution of telecommunication products also presents opportunities for improvements in 911 call management.

Adapting 911 systems to accommodate wireless and VoIP, with the latter building on capabilities developed for the former, was a significant and ongoing effort. Public Safety Answering Points (PSAP) must daily make allowances for vagaries of each such as; wireless location is a guess but accuracy is improving over time, or VoIP addresses may not be legitimate but validation capabilities are improving as suppliers improve procedures. Experience indicates that service suppliers are attempting to improve their capabilities for working with 911 and giving their customers adequate 911 services.

General Comments

The single most important aspect to rules adopted in support of the NET 911 Act must be to "do no harm". Progress has been made in interfaces to 911 by both CMS and VoIP providers and care must be taken to not prescribe solutions that will be restrictive on that progress. The Act clearly intends to promote effective interfaces to 911 including the ability for public safety to work with carriers to address not only issues with individual 911 calls but also long term collaboration within a national planning framework. The Commission should "do no harm" and where possible encourage collaboration between public safety and service suppliers.

Specific Issues

The Commission asks for comments on what "capabilities" should be included in its rules including the degree of definition for those items. It would be relatively easy to define detailed requirements that will with advances in technology become restrictive on options with a result that the critical issues such as the accuracy of the 911 caller's location is compromised. PSAPs need dispatchable information. That is location information that is adequate to permit the dispatch of assistance to the caller. The more specific the information the easier it is to dispatch with an associated greater likelihood of effective response. If the PSAP needs to return a call to the caller that person's phone number must be accurately displayed. The intervening steps and processes may change including how addresses are validated or even who maintains the information as providers and their business partners work to improve and simplify the process. The goal must be to meet the expectation of the public that when 911 is called their precise location will be displayed at the PSAP. "Precise location" in this case is their front door or equivalent as is done for landline Enhanced 911. Consideration should be given to defining "capabilities" in terms of the function(s) performed for the connection to 911 and for the quality of the delivered data, with those definitions useable to define how well a service provider is meeting the needs of the PSAP. The goal is to get the call to the correct PSAP for the caller's location, accurate call back number, and accurate location information. The accuracy of the location information must be the best the service supplier can achieve for their customer for the particular call to 911.

The question of how to define capabilities for CMRS that utilize WiFi or other internet connectivity for customers to connect to the CMRS carrier's network is an example of the dangers of specific regulations. Because they are a CMRS carrier under the rules promulgated for wireless 911 access, when 911 is dialed the call reverts to the wireless protocols going to the subscribing carrier or potentially to a competitor's network, even though WiFi may be available and the address associated with the WiFi hotspot may be far more accurate than the calculated latitude and longitude of the phone. If the carrier can process the 911 call via WiFi into their network and onward to 911 let them make that decision, including supplying the address of the hotspot if that is more accurate than the calculated location. If the CMRS carrier determines that for them the best tool is to use their network for all calls to 911 then the functional definition of "capability" should let them make that choice. T-Mobile is noted in conjunction with this issue and it should be noted that the company has been very active in collaborating with the 911 community in Washington State both in explaining the product and in pre and post deployment testing. Given that calls from their solutions end up on their network and within their call control systems it is difficult to characterize them as a VoIP provider since they are only using the VoIP technology as a substitute for a

portion of their transport. Their solutions appear to be technically complex but functionally very adequate, enforcing the concept that those who supply service will innovate to supply adequate 911 services if permitted to do so.

The issue of requiring roaming partners to provide the last-known caller location again should be satisfied by a functional requirement that 911 calls be routed to the correct PSAP. Doesn't matter how that is done, just that it is done.

Defining access and availability for the capabilities identified may well be an item that is left to the states and in particular the state regulatory commissions. The providers of the 911 services that are required to assure equal access are generally regulated exchange carriers or state agencies, both of which have rulemaking authority that can be tailored to the operational needs of the state 911 system.

In looking at the privacy and security aspects of IP-enabled Voice Service the Commission should again look at functional definitions of expectations. The objective is to provide a service level that precludes being endangered by security breaches in the VoIP provider's system. The VoIP provider should take steps to assure that their subscribers, and their systems, cannot be utilized for nefarious purposes against 911. A directly linked requirement would be for any service that permits 911 dialing to not only register with the Commission but to have available 24x7 contacts who can immediately take steps to preclude further damage should their network be used to compromise 911 capabilities. Furthermore that 24x7 access point should be available to immediately assist PSAPs that have received calls from the provider's network where the PSAP needs additional information to direct assistance to the caller. This includes provisions that permit the sharing of customer location information with a restriction that such information can be utilized only for purposes of extending assistance. PSAPs only ask for subscriber information when necessary due to circumstances that precluded delivery of the information in a normal manner and when the information is critical to directing response. Congress was abundantly clear that contact information should be maintained to permit collaboration between carriers and public safety. How that is best done may be an item that the National 911 office will need to address within their mandated planning effort.

Another consideration that the Commission should investigate is assuring that PSAPs have access to subscriber information based on knowing the phone number only. There are many instances where the caller is someone who a third party has called to report a problem which clearly requires dispatch of assistance. The person who called 911 may have only the caller's name and phone number. Query to the North American Numbering Plan Administrator to determine the carrier is an established procedure, but

only works if number assignments are correctly registered and if the carrier has a 24x7 access point who can and will provide information.

Summary

The Commission has a history of making the obligations of carriers clear ranging from its requirement that 911 be a basic service element that all carriers would provide to earlier rulings on VoIP which resulted in successful deployment of an interface to 911 in an incredibly short time. The NET 911 Act acknowledges and reinforces the Commission's role in assuring 911 access to emergency assistance. The specifics provide opportunities for the Commission to increase public safety and service supplier collaboration toward effective and innovative solutions to issues that may endanger 911 access. The Commission can facilitate this effort, including assistance to the National 911 Office who also is mandated to move forward with nationwide 911 planning, with an emphasis of working with individual states on this effort. The Washington State 911 Program looks forward to these activities as a new era in the improvement of 911 service to the public.

Respectfully submitted,

Robert G. Oenning
Enhanced 911 Program Administrator
State of Washington E911 Program
Building 20B, 20B Aviation Drive
Camp Murray, Washington 98430-5011

253-512-7011
b.oenning@emd.wa.gov